

Department of the Army New York District Corps of Engineers Jacob K. Javits Federal Building 26 Federal Plaza New York, NY 10278-0090

Week of September 23 – September 29, 2013

The following pages display the results from the USACE-NYD real-time website for the week of Monday, September 23, through Sunday, September 29, 2013.

There were nine blasts this week in the S-AK-3 project area.

We recorded vibrations in the S-AK-3 project area. The maximum vibration recorded was 0.615 in/s recorded at Elizabeth Marina on September 25. Table 1 summarizes the blasts this week.

Page 2 summarizes dredge locations for this week. The map shows the week's last dredge locations by colored symbols, connected by colored lines to the week's previous locations marked by gray symbols. Dredge Apache and Dredge 55 operated in S-AK-3 all week.

The remaining odd pages display the home page showing the maximum vibration measured in all of the stations for most recent event for each day:

September 23

September 24

September 25

September 26

September 27

September 28

September 29

The even pages show the maximum vibration observed at each station along easting for each event.

The results for this week show the measurements at the three active stations: New York Container Terminal (NYCT), Elizabethport, and Elizabeth Marina. The station locations are on each page.

Ambient ground vibrations at NYCT were all below 0.0531 in/s Ambient vibrations at Elizabethport were all below 0.0669 in/s. Ambient vibrations at Elizabeth Marina were all below 0.615 in/s. All blast vibration measurements are below the contract vibration limits for this site.

Table 1. S-AK-3 Blast Summary for this week

Blast	Date & Time	Distance from blast	e4s Max. vibration
	EST/EDT of blast	to e4s stations (feet)	(in/s)
AK-056	2013-09-23 15:22	0,430 - 1,750	0.351
AK-057	2013-09-24 12:21	0,530 - 1,650	0.242
AK-058	2013-09-24 11:26	0,320 - 1,900	0.385
AK-059	2013-09-25 12:00	0,270 - 1,930	0.615
AK-060	2013-09-26 09:10	0,380 - 1,800	0.324
AK-061	2013-09-26 16:46	0,660 - 1,540	0.129
AK-062	2013-09-27 10:00	0,660 - 1,560	0.121
AK-063	2013-09-27 15:43	0,630 - 1,590	0.159
AK-064	2013-09-28 14:59	0,610 - 1,630	0.111



Dredge Position Summary

This page summarizes dredge positions for the week. The Arthur Kill contract area is mapped with a top-of-rock map. The navigation grid is superimposed. The map shows dredge locations by colored symbols, connected by colored lines to the week's past locations marked by gray symbols. The map resets beginning the Monday of each week.

Mousing over a dredge location produces a pop-up text box giving dredge name, date of location, and easting and northing coordinates of the location in the NAD83 New Jersey State Plane coordinate system.

Click on a station for station information.



Todays Dredge Position

Latest Week's **Dredge Position Summary**

Project History List

The table below lists the date, name, easting, northing, and notes for the week's dredge positions. The position is the last reported dredge position

Dredge Location Table

Date	Dredge Name	Easting	Northing	Notes
2013-09-29 Sun	Drillboat Apache	579807	660646	
2013-09-28 Sat	Drillboat Apache	▶ 579392	660353	
2013-09-27 Fri	Dredge Delaware Bay		658969	
2013-09-27 Fri	Drillboat Apache	579503	660426	
2013-09-26 Thu	Dredge Delaware Bay		658969	
2013-09-26 Thu	Drillboat Apache	579143	660134	
2013-09-25 Wed	Dredge Delaware Bay		658969	
2013-09-25 Wed	Drillboat Apache	579004	660097	
2013-09-24 Tue	Dredge Delaware Bay		658969	
2013-09-24 Tue	Drillboat Apache	579364	660353	
2013-09-23 Mon	Dredge Delaware Bay		658969	
2013-09-23 Mon	Drillboat Apache	579198	660098	
	_			

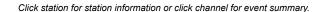


Arthur Kill Blast Vibration Summary

This site summarizes the measured ground vibrations in northwest Staten Island, from rock blasting in the Arthur Kill and other possible sources. The site is updated daily. The data are intended for the sole use of the US Army Corps of Engineers - New York District, for managing and monitoring the performance of NYNJ Harbor Deepening Project Contract in Arthur Kill starting 25 July 2011.

This page represents the most recent observations.

The Arthur Kill contract area is mapped below in light gray. The navigation grid is superimposed. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge is marked in red. The easting and northing map coordinates in the New Jersey State Plane coordinate system are in yellow. The locations of active seismograph stations are marked by yellow station symbols. (e4sciences stations are circles. CDB stations are triangles.) Selecting a station activates its station page.

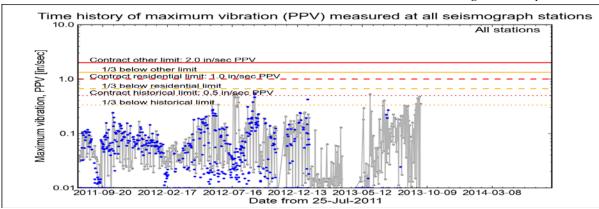




Latest Event Summary

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 $\textbf{Date and time of last reading:}\ Mon\ 23\text{-Sep-}2013\ 16\text{:}47\text{:}35$



(Click on graph or here for larger view)

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Mon 23-Sep-2013	16:47:35	0.3510	Elizabeth Marina
Ambient	Sun 22-Sep-2013	16:07:45	0.0063	NYCT
Ambient	Sat 21-Sep-2013	13:02:34	0.4750	Elizabeth Marina
Ambient	Fri 20-Sep-2013	15:52:45	0.0100	NYCT
Ambient	Thu 19-Sep-2013	16:47:35	0.4140	Elizabeth Marina
Ambient	Wed 18-Sen-2013	20:47:35	0.4130	Elizabeth Marina
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Arthur Kill Blasting Event Summary

This page summarizes measurements of ground vibrations for the selected event. This page displays the maximum vibration recorded at each and every seismograph station during this event.

The Arthur Kill contract area is mapped below with a top-of-rock map. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge location is marked in red. The easting and northing map coordinates in the New Jersey State Plane coordinate system are in yellow. The locations of active seismograph stations are marked by yellow station symbols. (e4sciences stations are circles. CDB stations are triangles.) Selecting a station activates its station page.

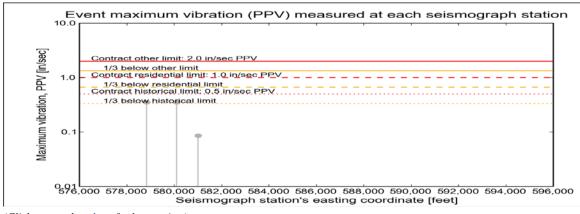
Click station for more information about the station.



Selected Event Summary

The graph below plots the maximum vibration during the selected event period (blast or ambient) recorded at each and every seismograph station along the easting positions. The vertical axis gives the maximum vibration in peak particle velocity (PPV) in units of inches per second (in/sec). If the maximum vibration level at a station is below 0.01 in/sec, the marker is a v-shaped triangle at 0.01 in/sec. (Light-gray stems indicate ambient-vibration level. Black stems indicate blast-vibration level. Dark-gray stems indicate predicted blast-vibration level.)

Date of reading: Mon 23-Sep-2013



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Mon 23-Sep-2013	16:47:35	0.351	Ambient
Elizabeth Port - e4s009 NYCT - e4s008	Mon 23-Sep-2013 Mon 23-Sep-2013	16:47:35 16:52:47	0.351 0.0862	Ambient Ambient

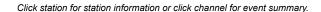


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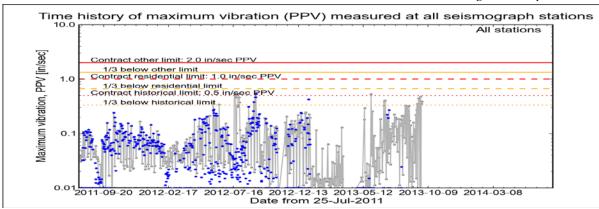




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Date and time of last reading: Tue $24\text{-Sep-}2013\ 18:52:25$



(Click on graph or here for larger view)

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Tue 24-Sep-2013	18:52:25	0.3850	Elizabeth Marina
Ambient	Mon 23-Sep-2013	16:47:35	0.3510	Elizabeth Marina
Ambient	Sun 22-Sep-2013	16:07:45	0.0063	NYCT
Ambient	Sat 21-Sep-2013	13:02:34	0.4750	Elizabeth Marina
Ambient	Fri 20-Sep-2013	15:52:45	0.0100	NYCT
Ambient	Thu 19-Sen-2013	16:47:35	0.4140	Elizabeth Marina
	e4sciences Earthworks	5, LLC 27 Glen Roa	nd, Sandy Hook, CT 064	82 www.e4sciences.com



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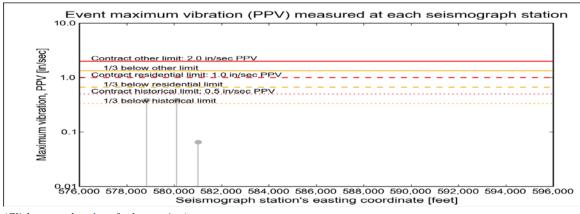
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Date of reading: Tue 24-Sep-2013



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Tue 24-Sep-2013	18:52:25	0.385	Ambient
Elizabeth Port - e4s009 NYCT - e4s008	Tue 24-Sep-2013 Tue 24-Sep-2013	18:52:25 12:54:25	0.385 0.065	Ambient Ambient



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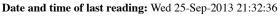
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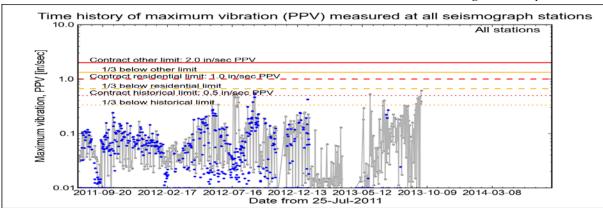
Click station for station information or click channel for event summary.



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(Click on graph or here for larger view)

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Wed 25-Sep-2013	21:32:36	0.6150	Elizabeth Marina
Ambient	Tue 24-Sep-2013	18:52:25	0.3850	Elizabeth Marina
Ambient	Mon 23-Sep-2013	16:47:35	0.3510	Elizabeth Marina
Ambient	Sun 22-Sep-2013	16:07:45	0.0063	NYCT
Ambient	Sat 21-Sep-2013	13:02:34	0.4750	Elizabeth Marina
Ambient	Fri 20-Sen-2013	15:52:45	0.0100	NYCT
	e4sciences Earthwork	S, LLC 27 Glen Ro	ad, Sandy Hook, CT 064	82 www.e4sciences.com

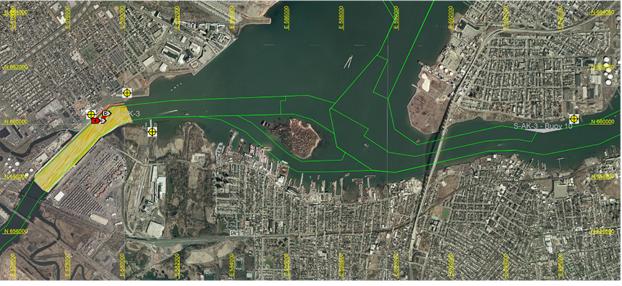


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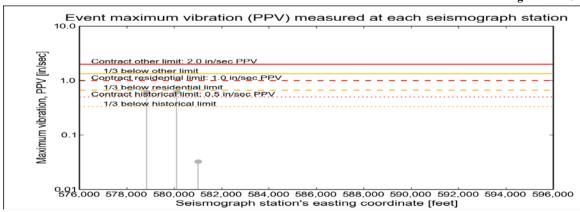
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Date of reading: Wed 25-Sep-2013



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Wed 25-Sep-2013	21:32:36	0.615	Ambient
Elizabeth Port - e4s009 NYCT - e4s008	Wed 25-Sep-2013 Wed 25-Sep-2013	21:32:36 21:22:46	0.615 0.0325	Ambient Ambient



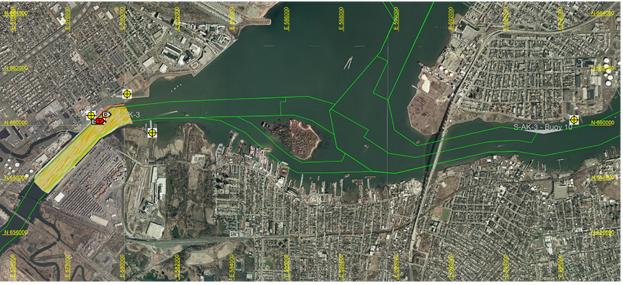
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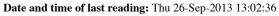
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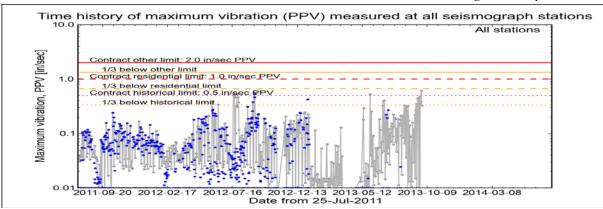
Click station for station information or click channel for event summary.



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(Click on graph or here for larger view)

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Thu 26-Sep-2013	13:02:36	0.3240	Elizabeth Marina
Ambient	Wed 25-Sep-2013	21:32:36	0.6150	Elizabeth Marina
Ambient	Tue 24-Sep-2013	18:52:25	0.3850	Elizabeth Marina
Ambient	Mon 23-Sep-2013	16:47:35	0.3510	Elizabeth Marina
Ambient	Sun 22-Sep-2013	16:07:45	0.0063	NYCT
Ambient	Sat 21-Sen-2013	13:02:34	0.4750	Elizabeth Marina
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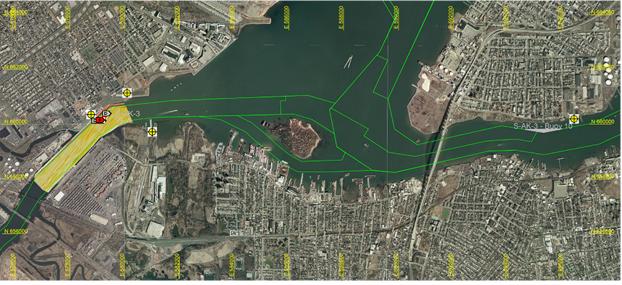


Arthur Kill Blasting Event Summary

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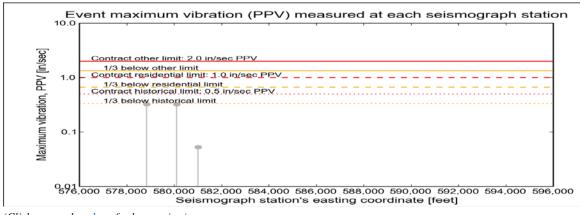
Click station for more information about the station.



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Date of reading: Thu 26-Sep-2013



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Thu 26-Sep-2013	13:02:36	0.324	Ambient
Elizabeth Port - e4s009 NYCT - e4s008	Thu 26-Sep-2013 Thu 26-Sep-2013	13:02:36 19:52:43	0.324 0.0531	Ambient Ambient



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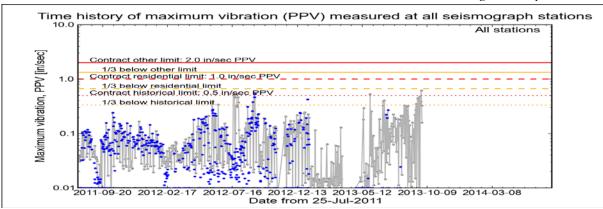
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Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Fri 27-Sep-2013	19:32:33	0.1590	Elizabeth Marina
Ambient	Thu 26-Sep-2013	13:02:36	0.3240	Elizabeth Marina
Ambient	Wed 25-Sep-2013	21:32:36	0.6150	Elizabeth Marina
Ambient	Tue 24-Sep-2013	18:52:25	0.3850	Elizabeth Marina
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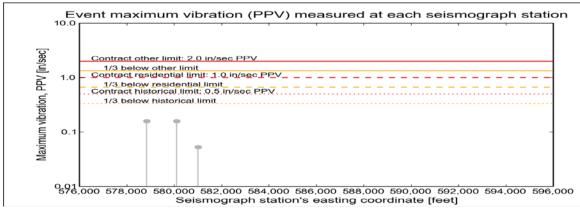
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Date of reading: Fri 27-Sep-2013



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Fri 27-Sep-2013	19:32:33	0.159	Ambient
Elizabeth Port - e4s009 NYCT - e4s008	Fri 27-Sep-2013 Fri 27-Sep-2013	19:32:33 13:53:15	0.159 0.0531	Ambient Ambient

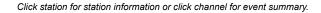


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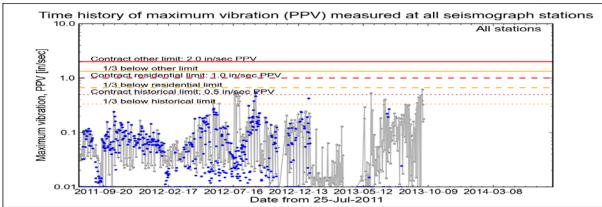




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Date and time of last reading: Sat 28-Sep-2013 18:47:33



(Click on graph or here for larger view)

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Sat 28-Sep-2013	18:47:33	0.1790	Elizabeth Marina
Ambient	Fri 27-Sep-2013	19:32:33	0.1590	Elizabeth Marina
Ambient	Thu 26-Sep-2013	13:02:36	0.3240	Elizabeth Marina
Ambient	Wed 25-Sep-2013	21:32:36	0.6150	Elizabeth Marina
Ambient	Tue 24-Sep-2013	18:52:25	0.3850	Elizabeth Marina
Ambient	Mon 23-Sen-2013	16:47:35	0.3510	Elizabeth Marina
	Transfer with High tax v			

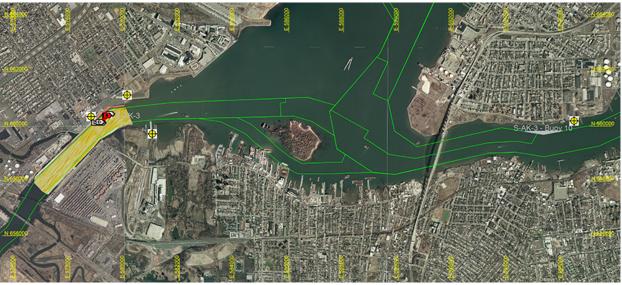


Arthur Kill Blasting Event Summary

This page summarizes measurements of ground vibrations for the selected event. This page displays the maximum vibration recorded at each and every seismograph station during this event.

The Arthur Kill contract area is mapped below with a top-of-rock map. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge location is marked in red. The easting and northing map coordinates in the New Jersey State Plane coordinate system are in yellow. The locations of active seismograph stations are marked by yellow station symbols. (e4sciences stations are circles. CDB stations are triangles.) Selecting a station activates its station page.

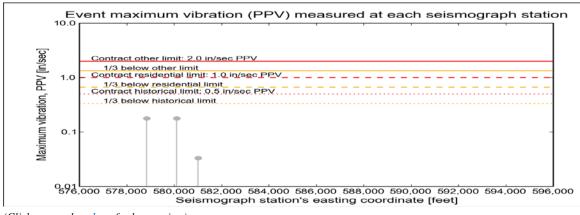
Click station for more information about the station.



Selected Event Summary

The graph below plots the maximum vibration during the selected event period (blast or ambient) recorded at each and every seismograph station along the easting positions. The vertical axis gives the maximum vibration in peak particle velocity (PPV) in units of inches per second (in/sec). If the maximum vibration level at a station is below 0.01 in/sec, the marker is a v-shaped triangle at 0.01 in/sec. (Light-gray stems indicate ambient-vibration level. Black stems indicate blast-vibration level. Dark-gray stems indicate predicted blast-vibration level.)

Date of reading: Sat 28-Sep-2013



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Sat 28-Sep-2013	18:47:33	0.179	Ambient
Elizabeth Port - e4s009 NYCT - e4s008	Sat 28-Sep-2013 Sat 28-Sep-2013	18:47:33 18:52:47	0.179 0.0331	Ambient Ambient



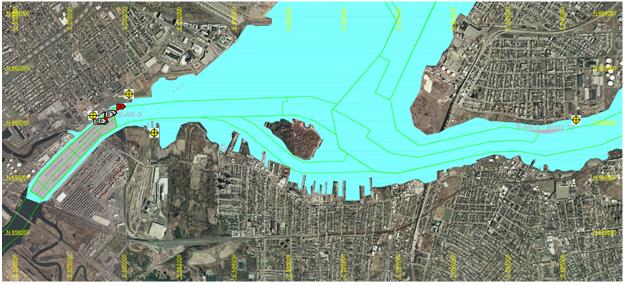
Arthur Kill Blast Vibration Summary

This site summarizes the measured ground vibrations in northwest Staten Island, from rock blasting in the Arthur Kill and other possible sources. The site is updated daily. The data are intended for the sole use of the US Army Corps of Engineers - New York District, for managing and monitoring the performance of NYNJ Harbor Deepening Project Contract in Arthur Kill starting 25 July 2011.

This page represents the most recent observations.

The Arthur Kill contract area is mapped below in light gray. The navigation grid is superimposed. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge is marked in red. The easting and northing map coordinates in the New Jersey State Plane coordinate system are in yellow. The locations of active seismograph stations are marked by yellow station symbols. (e4sciences stations are circles. CDB stations are triangles.) Selecting a station activates its station page.

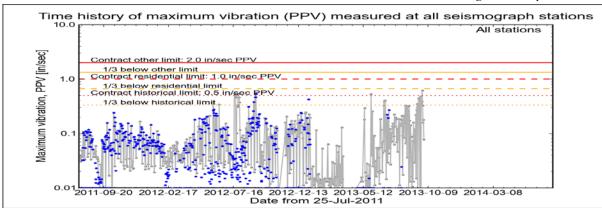
Click station for station information or click channel for event summary.



Latest Event Summary

The graph below is a plot of the maximum vibration recorded by any and all of the numerous seismograph stations during the current observation event (ambient or blast). The horizontal axis gives the date from the start of the project on 25 July 2011. The vertical axis gives the maximum vibration in peak particle velocity (PPV) in units of inches per second (in/sec). The red curves show the project's contract limits; the orange curves show one-third (1/3) below these contract limits. (The light gray curve is ambient-vibration level. The blue dots are blast-vibration levels.)

Date and time of last reading: Sun 29-Sep-2013 04:36:34



(Click on graph or here for larger view)

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Sun 29-Sep-2013	04:36:34	0.0775	Elizabeth Marina
Ambient	Sat 28-Sep-2013	18:47:33	0.1790	Elizabeth Marina
Ambient	Fri 27-Sep-2013	19:32:33	0.1590	Elizabeth Marina
Ambient	Thu 26-Sep-2013	13:02:36	0.3240	Elizabeth Marina
Ambient	Wed 25-Sep-2013	21:32:36	0.6150	Elizabeth Marina
Ambient	Tue 24-Sen-2013	18:52:25	0.3850	Elizabeth Marina
	The second secon			



Arthur Kill Blasting Event Summary

This page summarizes measurements of ground vibrations for the selected event. This page displays the maximum vibration recorded at each and every seismograph station during this event.

The Arthur Kill contract area is mapped below with a top-of-rock map. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge location is marked in red. The easting and northing map coordinates in the New Jersey State Plane coordinate system are in yellow. The locations of active seismograph stations are marked by yellow station symbols. (e4sciences stations are circles. CDB stations are triangles.) Selecting a station activates its station page.

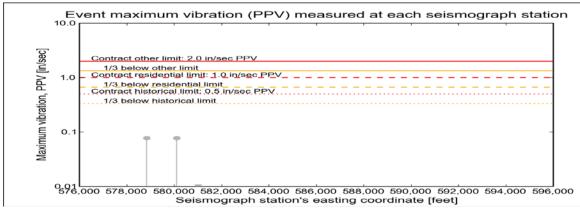
Click station for more information about the station.



Selected Event Summary

The graph below plots the maximum vibration during the selected event period (blast or ambient) recorded at each and every seismograph station along the easting positions. The vertical axis gives the maximum vibration in peak particle velocity (PPV) in units of inches per second (in/sec). If the maximum vibration level at a station is below 0.01 in/sec, the marker is a v-shaped triangle at 0.01 in/sec. (Light-gray stems indicate ambient-vibration level. Black stems indicate blast-vibration level. Dark-gray stems indicate predicted blast-vibration level.)

Date of reading: Sun 29-Sep-2013



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Sun 29-Sep-2013	04:36:34	0.0775	Ambient
Elizabeth Port - e4s009 NYCT - e4s008	Sun 29-Sep-2013 Sun 29-Sep-2013	04:36:34 15:52:46	0.0775 0.00375	Ambient Ambient